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**FMPC RI/FS PROJECT K-65 SILOS SAMPLING
AND ANALYSIS PLAN RESPONSE TO OEPA
COMMENTS**

10-2-90

**DOE/OEPA
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RESPONSE**

**FMPC RI/FS PROJECT
K-65 SILOS SAMPLING AND ANALYSIS PLAN
RESPONSE TO OEPA COMMENTS**

Page 7, middle paragraph

COMMENT: It should be made clear that this scan will provide "worst case condition" for radiological parameters only.

RESPONSE: Agree. It is true that sampling the section of the core with the highest radiation reading will only assure consideration of a "worst case condition" from a radiological standpoint. The intent is to better define the upper boundary of the content and concentrations of the radiological constituents of the K-65 residues. The paragraph has been revised.

Page 12, 2.3

COMMENT: The first paragraph states that an additional core will be collected from Silo 1 to conduct laboratory stabilization studies. Considering the differences between Silo 1 and 2's contents, samples should be collected from both silos for these studies.

RESPONSE: The material required for the stabilization study (vitrification) was retrieved during the 1989 sampling effort so an additional core is no longer necessary. The sentence specifying an additional core has been deleted.

Page 21, 3.2.3

COMMENT: In the first paragraph, explain why the lime sludge is similar to K-65 residues.

RESPONSE: During the development of the work scope for the K-65 Silos resampling effort, it was suggested that the Wink Vibra-Corer be tested in material similar to the K-65 residues. Based on observations of the K-65 material withdrawn from the silos during the summer 1989 sampling effort, it was determined that the lime sludge pond material was most similar to the K-65 material. Of the sources of readily available material the moist, putty-like material observed on the sludge pond surfaces was estimated to most closely approximate the physical characteristics of the K-65 material. The paragraph has been revised for clarity.

Page 28, top paragraph

COMMENT: Paperwork in ziplock bags should not be in contact with the residues.

RESPONSE: The sampling paperwork, the Chain-of-Custody forms and Request-for-Analysis forms, will be inserted in a ziplock bag which will then be placed in the shipping containers. The residue material will be placed in sampling bottles and will not come in contact with the sampling paperwork. The paragraph has been revised for clarity.

Page 29, Table 3-2

COMMENT: Since the screening of alternatives report discusses contaminant separation and possible recovery of metals (gold, platinum, palladium), shouldn't these parameters be analyzed. These silos should only be sampled once. Collect enough samples for all future analytical work and bench tests.

RESPONSE: The contaminant separation treatment process for the K-65 residues will be designed to separate the radionuclides and hazardous waste from the non-hazardous components of the residues. The resultant non-hazardous waste material may be disposed of in a non-hazardous landfill and will contain substantial quantities of gold, platinum, and palladium. The treatment process will not recover these precious metals, only separate them, along with other elements, from the radioactive and hazardous components of the residues. This non-hazardous component containing the precious metals could then be used by a smelter to recover the gold, platinum, and palladium. The approximate quantities of these metals were determined through previous analyses and due to the fact that these metals are not relevant from a treatment process and waste disposal perspective, additional analyses to more accurately determine their content is not required.

Appendix A, Page 11

COMMENT: In 7.3.18, there is a caution stating that the sampling device should not be operating during removal. However, in 7.3.18.1 the operator is told to operate the device if difficulty is encountered. The purpose of this is understood but the wording is unclear.

RESPONSE: The Vibra-Corer should not be routinely operated during withdrawal of the device as it is possible for some of the retrieved material to drop from the end of the Vibra-Corer. In the event, however, that the Vibra-Corer should bind upon withdrawal, it is acceptable to momentarily actuate the vibratory mechanism to free the sampler. The text has been revised to clarify the statements.